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REMARKS

Amendments to the Specification

The incorporation by reference of the European patents listed on page 6, lines 25-29 in the original application is amended to include the corresponding U.S. applications for the same inventions and the same patent families. See, MPEP §608.01(p).

The additional text discussing polyurethane gel is inherent in the incorporated reference of the European patents and their U.S. equivalents. Accordingly, adding the additional text proper under MPEP §2163.07(a), because it does not constitute new matter to replace or add the referenced text, See also MPEP §2163.07(b).

Amendment to the Claims

Upon entry of the foregoing amendment, 1-23 claims are pending in the application. Of the pending claims, 1, 20 and 21 are independent. Claims 21-23 are new.

Claim Rejections under 35 U.S.C. § 112

The Examiner has rejected Claim Nos.9-13 under 35 U.S.C. §112, second paragraph, because of failing to comply with the enablement requirement.

Claims 9-11 have been amended to overcome §112 second paragraph rejection. The amendments are supported on page 4, lines 4-5, 19-20 and 23-25, and also by column 2, lines 38-42 of incorporated U.S. Patent No. 5,362,834.

Claim 12 is supported by the inclusion by reference of the patents enumerated EP 57 838 in the original and now amended to include the equivalent U.S. patent, U.S. Patent No. 4,456,642, See, Column 3, lines 18-34 and patent EP 511 570.

The foregoing claim amendments have corrected the claim language to more particularly point out and distinctly claim the subject matter of the present invention. Accordingly, Applicant respectfully submits that the rejections of these claims have been obviated and should now be withdrawn.

Rejections under 35 U.S.C. § 103

The Examiner has rejected Claim Nos.1-20 under 35 U.S.C. §103 as being unpatentable over Burgdörfer et al. in view of Withers. Burgdörfer et al. (U.S. 4,456,642) can be found on the applicant's Form PTO-1449.

The amendments to claim 1 submitted herewith are supported as follows: the limitation to "covalently cross linked PU-matrix" is supported at column 3, lines 10-15 and 18-21 in the Burgdorfer reference, U.S. patent 4,456,642, incorporated by reference. The "homogeneously distributed" limitation is supported at page 7, lines 1-10 of the present application and the "exclusion of air bubbles" limitation is supported at page 5, lines 12-14 of the present application.

"Withers" does not render the invention obvious, because the properties and application of the "Withers" pad - which is an agglomerated article of rubber-like particles - are such that the improvement in properties cannot be transferred to a soft gel material with the microspheres distributed therein.

"Withers" discloses "an elastomer article for cushioning or mounting purposes including a mass substantially of tacky rubbery solid microspheres formed by suspension polymerization and agglomerated together in substantial contact with one another" (abstract). As can easily be recognized from the figures, the agglomerated solid microspheres must encapsulate a (residual) dispersing agent like a solvent (the solvent of the suspension polymerization) or just air, in case the tacky spheres are thoroughly dried and then agglomerated (see column 2, line 64-column 3, line 29). This agglomerate is forming a pad, e.g. a resilient shock absorber or a cushioning component for footwear (column 2, lines 27-29) and consists of "tacky rubbery solid microspheres" being in contact with each other. The material could be characterized as a rubber-like solid with an air cushioning. In no way can this material be expected to provide to the user the feeling of a gel material. Thus, the reference cannot suggest to the skilled practitioner taking mechanical data from this disclosure (which is not even given in figures) and transfering it to a gel material like that of the present invention.

Burgdörfer introduces the fillers without expecting a change in elastic properties.

Starting from "Burgdörfer" the skilled practitioner could not expect the properties of the gel material of the invention (characterized in the specification from page 13, line 9 up to page 14, line 6). These properties are experienced by the customer in that he will sink in a little more on a mattress, a seat or a shoe sole made of the material according to the invention although the specific hardness of the article, i.e. the "support", is not altered. These effects cannot be taken from the "Withers" reference since their pad is made from agglomerated particles of solid polymer microspheres. It is impossible that a similar feeling can be experienced as with a gel

material. The differences between "Withers" and the invention are also apparent in the recitations of new claim 21.

The expression "homogeneously distributed therein" further distinguishes claim 1 from the prior art since a gel "that is not agglomerated" is only described in connection with coated microspheres. The homogeneous distribution follows from the mixing procedure of the examples and from the term 'filler" since polymer fillers are usually homogeneously distributed. Moreover, it is a true restriction compared to the situation that (without further specification) the filler could be "homogeneously" or "non homogeneously" distributed.

New Claims

New claim 21 is supported as follows: with regard to the molded article, on page 10, lines 23-25; with regard to the uses listed in the preamble, page 1, line 20; with regard to the hollow elastic microspheres limitation, page 8, lines 14-18, page 9, line 24 and page 11, line 13; with regard to the microspheres as filler that is homogenously distributed limitation, page 7, lines 1-10; and with regard to the exclusion of air bubbles limitation, on page 5, lines 12-14.

Claims 22 and 23 are supported by page 11, lines 6-14.

Conclusion

Applicant respectfully submits that the independent claims are allowable over the prior art of record, including the cited references. For similar reasons, and for the additional reasons set forth above, Applicant urge that the dependent claims are also allowable.

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All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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